What is claimed is:

1. A method for preparing a Li-Mn-Ni oxide for a lithium secondary battery having a composition of $Li[Ni_XLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}]O_2$ ($0.05 < X < 0.6$), comprising the steps of:

a) preparing an aqueous solution by resolving lithium salt, manganese salt and nickel salt into distilled water;

b) forming gel by heating the aqueous solution;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant; and

e) performing a second thermal treatment on the resultant powder, and grinding the resultant.

2. The method as recited in claim 1, wherein the lithium salt, manganese salt and nickel salt are water-soluble salts.

3. The method as recited in claim 1, wherein the lithium salt is lithium acetate dihydrate ($CH_3CO_2Li \cdot 2H_2O$), and the manganese salt and the nickel salt are manganese acetate tetrahydrate ($(CH_3CO_2)_2Mn \cdot 4H_2O$) and nickel(II) nitrate hexahydrate ($Ni(NO_3)_2 \cdot 6H_2O$), respectively.

4. The method as recited in claim 1, wherein the gel is burnt at a temperature of 400 ~ 500°C.

5. The method as recited in claim 1, wherein the first thermal treatment is performed at a temperature of 400 ~ 500°C.

6. The method as recited in claim 1, wherein the second thermal treatment is performed at a temperature of 700 ~ 1000°C.

7. A method for preparing a Li-Mn-Ni oxide for a lithium secondary battery having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}]O_2$ ($0.05 < X < 0.6$), comprising the steps of:

a) preparing an aqueous solution by resolving lithium acetate dihydrate ($CH_3CO_2Li \cdot 2H_2O$), manganese acetate tetrahydrate ($(CH_3CO_2)_2Mn \cdot 4H_2O$) and nickel(II) nitrate hexahydrate ($Ni(NO_3)_2 \cdot 6H_2O$) into distilled water;

b) forming gel by heating the aqueous solution at over 100°C;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant; and

e) performing a second thermal treatment on the resultant powder at a temperature of 700 ~ 1000°C, and grinding the resultant.

8. A Li-Mn-Ni oxide having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}]O_2$ ($0.05 < X < 0.6$) prepared by using a method for preparing a Li-Mn-Ni oxide for a lithium secondary battery, the method comprising the steps of:

a) preparing an aqueous solution by resolving lithium salt, manganese salt and nickel salt into distilled water;

b) forming gel by heating the aqueous solution;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant; and

e) performing a second thermal treatment on the resultant powder, and grinding the resultant.

9. A Li-Mn-Ni oxide having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}]O_2$ ($0.05 < X < 0.6$) prepared by using a method for preparing a Li-Mn-Ni oxide for a lithium secondary battery, the method comprising the steps of:

a) preparing an aqueous solution by resolving lithium acetate dihydrate ($CH_3CO_2Li \cdot 2H_2O$), manganese acetate tetrahydrate ($(CH_3CO_2)_2Mn \cdot 4H_2O$) and nickel(II) nitrate hexahydrate ($Ni(NO_3)_2 \cdot 6H_2O$) into distilled water;

b) forming gel by heating the aqueous solution at over 100°C;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant; and

e) performing a second thermal treatment on the resultant powder at a temperature of 700 ~ 1000°C, and grinding the resultant.

10. A lithium secondary battery including a Li-Mn-Ni

oxide having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}O_2$ ($0.05 < X < 0.6$) which is prepared by using a method for preparing a Li-Mn-Ni oxide for a lithium secondary battery, the method comprising the steps of:

a) preparing an aqueous solution by resolving lithium salt, manganese salt and nickel salt into distilled water;

b) forming gel by heating the aqueous solution;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant; and

e) performing a second thermal treatment on the resultant powder, and grinding the resultant.

11. A lithium secondary battery including a Li-Mn-Ni oxide having a composition of $Li[Ni_xLi_{(1/3-2x/3)}Mn_{(2/3-x/3)}O_2$ ($0.05 < X < 0.6$) prepared by using a method for preparing a Li-Mn-Ni oxide for a lithium secondary battery, the method comprising the steps of:

a) preparing an aqueous solution by resolving lithium acetate dihydrate ($CH_3CO_2Li \cdot 2H_2O$), manganese acetate tetrahydrate ($(CH_3CO_2)_2Mn \cdot 4H_2O$) and nickel(II) nitrate hexahydrate ($Ni(NO_3)_2 \cdot 6H_2O$) into distilled water;

b) forming gel by heating the aqueous solution at over 100°C;

c) preparing oxide powder by burning the gel;

d) performing a first thermal treatment on the oxide powder, and grinding the resultant; and

e) performing a second thermal treatment on the resultant powder at a temperature of 700 ~ 1000°C, and grinding the resultant.